REMARKS

Applicant's undersigned attorney initially thanks Examiner Burch for the thoroughness of the Office Action.

Claims 1 through 32 have been cancelled without prejudice or disclaimer.

Claims 33 through 49 are presented herein and are pending in this application.

Claim 50 has been added.

THE SUBJECT INVENTION

The subject invention is directed to a first harmonic mode pole vibration damper apparatus 20, which is attached to a fixedly positioned pole P to effect damping of wind-induced first harmonic mode vibrations of the pole. Such first harmonic mode pole vibrations occur in the relatively fixedly positioned vertical plane of the wind direction and are consequently totally different from constant rotation vibrations created by rotating shafts or the like, such as disclosed in the newly cited nonanalogous Hannah *et al.* U.S. Patent No. 5,724,862 and Riehl U.S. Patent No. 4,711,610, both of which are in a field other than the present invention and are incapable of reducing wind induced first harmonic mode vibrations.

The subject invention employs two identical main housing components comprising a first horizontal housing component half-portion 22 and a second horizontal housing component half-portion 24 which are connected together by threaded screws 60.

The horizontal half-portions 22 and 24 respectively include inner partial cylinder sleeve surfaces 26 and 26′ which facingly contact and engage the outer surface of the pole so that adjustment of threaded screws 60 clamps the entire device to the pole in a secure manner. Horizontal half-portions 22 and 24 each include partitioning panels extending vertically upward from horizontal floor panels 50 and 50′ and are respectively connected at opposite ends to an inner partial cylinder sleeve 26, 26′ and an outer partial cylinder sleeve 34, 34′ so as to define non-circular damping weight receiving chambers 48 and 48′. Spherical metal weights 48, 48′ formed of lead or other metals are positioned in each weight receiving chamber and may selectively be provided with a protective plastic cover such as polyurethane.

THE PRIOR ART

Hannah *et al.* U.S. Patent No. 5,724,862 is directed to nonanalogous art that is not even remotely concerned with, or capable of, damping wind vibrations of a non-rotating pole. In fact, Hannah *et al.* discloses a variety of embodiments for damping vibration of a ***horizontal rotating shaft*** 32 and a variety of other ***horizontal rotating structures***. Figure 8A of Hannah *et al.* relied upon in rejecting claims 33 through 36 and 39 through 49 discloses a plurality of annular circular chambers each holding a plurality of spherical weights so that movement of the weights is restricted to annular movement in a ***vertical plane*** along their respective annular circular chambers. The Hannah *et al.* patent does not anticipate the claimed structure and is totally devoid of any suggestion or teaching that

the embodiments disclosed therein would be capable of damping first harmonic mode wind induced pole vibrations.

Newly cited Riehl U.S. Patent No. 4,711,610 is not relevant to the claimed wind induced pole vibration art in that it is directed to means for balancing a ***rotating balancing chuck*** 100 used in the production of semi-conductor wafers supported on the chuck. A plurality of pockets 118 are each formed between a pair of opposed circular segments 122 for normally receiving and retaining a weight 116 in a fixed position as illustrated in Figure 5A; however, each weight can also be moved vertically to the elevated position illustrated in Figure 5B. An annular race 114 is provided above the pockets 118 so that the counter weight 116 when positioned in the elevated position shown in Figure 5B is only capable of movement along the annular race as described in column 3, line 36 through column 4, line 22. The Riehl patent does not disclose "a first and second planar plate shown at the end of the respective element numbers 122" as asserted in the rejection of claims 41 through 43 in paragraph 10 of the Office Action. More specifically, the end of the respective elements 122 is not a plate but is merely an open space.

Kolya *et al.* U.S. Patent No. 4,655,317 is not in the field of wind induced pole vibration damping but is directed to the unrelated and completely remote art of noise reduction of a gas stream emitted by a blow-off valve and would not be a source of solution to problems in the damping of first harmonic mode wind induced vibrations of a pole.

OBJECTION TO THE SPECIFICATION UNDER 35 USC § 132(A)

Paragraph 1 of the Office Action objected to the specification for lacking support for "approximately three (3) inches" as recited on original application page 8. A similar objection was made with respect to "either prior to or after the mounting of half portions 22 and 24 on pole P" on original application page 9. The foregoing objections have been obviated by deletion of the objected to language.

CLAIM OBJECTIONS

Claims 33 through 43 were objected to with respect to "inner partial cylinder" in line 6 of claim 33. This objection has been corrected by effecting amendment of claim 33 to read –inner partial cylinder sleeve– in accordance with the Examiner's suggestion.

REJECTION UNDER 35 USC § 112

Paragraph 4 of the Office Action rejected claims 44 through 49 for lack of support in the specification with respect to the "dry" limitation recited in line 3 of original claim 44. Claim 44 has been amended to eliminate usage of "dry" and to define "weight receiving chambers solely occupied by ambient air and a spherical ball". The provision of ambient air in the weight receiving chamber is an inherent condition clearly illustrated in the drawings.

REJECTION UNDER 35 USC § 102

Paragraph 6 of the Office Action rejected claims 33, 34, 44 and 45 under 35 USC § 102(b) as being anticipated by Hannah *et al.* U.S. Patent No. 5,724,862. The rejection included a marked-up copy pf Figure 8A of Hannah *et al.* in which labels are applied to various components of the illustrated device and future references herein to "Figure 8A" constitute a reference to that marked-up copy.

This rejection is incorrect both factually and legally in that: (1) Hannah *et al.* does not disclose each and every claimed structural and functional limitation; and (2) modification of the Hannah *et al.* structure which is not taught or suggested by Hannah *et al.* is intrinsic to the rejection and therefore precludes reliance upon 35 USC § 102.

More specifically, the Section 102(b) rejection of claims 33, 34, 44 and 45 refers to a plurality of claimed structural and functional features requiring specific orientations which are purportedly illustrated in Figure 8A; however, such features and orientations are not shown in the Figure 8A structure as oriented in the Hannah *et al.* patent. This rejection is consequently based on an inherent ***modification*** of the Hannah *et al.* reference which precludes anticipation under Section 102 and is incorrect as a matter of law. Specifically, positions taken in paragraph 6 of the Office Action inherently require a 90 degree rotation about a horizontal axis of the Figure 8A device of Hannah *et al.* which under controlling Federal Circuit authority precludes anticipation under 35 USC § 102(b).

For example, the Figure 8A device would have to be rotated 90 degrees about a horizontal axis perpendicular to shaft 32 in order for the recited structure to be "mountable on a pole 32 capable of damping wind induced first harmonic mode vibrations" as recited in the paragraph 6 rejection. It is respectively pointed out that the "pole" is a conventional vertical pole as shown in the drawings and should be so interpreted in light of the specification.

Similarly, the structural element labeled "Inner partial cylinder sleeve surface" in Figure 8A would have to be rotated 90 degrees in order to have ***"a center of curvature and being dimensioned and shaped to fit in a mating manner over, and in facing contact with, an upper end portion of a pole have an axis approximately coextensive with the center of curvature of the pole as shown"***.

In like manner, the structural element labeled "Outer partial cylinder sleeve surface" in Figure 8A would have to be rotated 90 degrees in order to be ***"positioned outwardly of the inner partial cylinder sleeve surface and having a lower end portion and a center of curvature that is coextensive with the center of curvature of the inner partial cylinder sleeve as shown"***.

The "floor panel" referred to in the rejection is not labeled or disclosed in Figure 8A. Possibly, the unlabeled vertical wall plate facing the viewer in the marked-up copy of Figure 8A was considered to be a "floor panel"; however, in order for that wall plate to be a ***floor panel***, a 90 degree rotation of the Figure 8A device would be necessary.

Moreover, Figure 8A of Hannah *et al.* does not disclose a "floor panel" which is "below the balls" as stated in the rejection, and, such positioning of the above discussed vertical wall plate would require a 90 degree rotation of the Figure 8A device. The items incorrectly labeled "Partitioning panels" labeled in Figure 8A are actually horizontally oriented cylinders and are not panels ***"extending upwardly from the floor panel"*** as recited in paragraph 6 of the Office Action, and are not anticipated by the Figure 8A structure. Also, in order for the "Partitioning panels" to extend upward, a 90 degree rotation of Figure 8A would be required.

The positions asserted in paragraph 6 consequently have the inherent effect of creating a hypothetical structure different from the Figure 8A structure of Hannah *et al.* The hypothetical structure relied upon in the 35 USC § 102 rejection is not "patented or described" by Hannah *et al.* as required by the language of 35 USC § 102 and the rejection of claims under Section 102 was consequently manifestly legally improper.

In the remarkably similar case of *In re Gordon*, 221 USPQ, page 1125, the Court of Appeals, Federal Circuit, was faced with a rejection of claims based upon the Examiner's turning of a liquid strainer disclosed in French U.S. Patent No. 1,175,948 upside down in order to use the upside down device in rejection of application claims. The court held that such rejection was not proper, where, as here, (1) the reference itself did not teach the modified version of the device. The Court stated:

> "The question is not whether a patentable distinction is created by viewing a prior art apparatus from one direction and a claimed apparatus from another, but, rather, whether it would have been obvious from a fair reading of the prior art reference as a whole to turn the prior art apparatus upside down. French teaches a liquid strainer which relies, at least in part, upon the assistance of gravity to separate undesired dirt and water from gasoline and other light oils. Therefore, it is not seen that French would have provided any motivation to one or ordinary skill in the art to employ the French apparatus in an upside down orientation. The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification. *See Carl Schenck, A.G. v. Nortron Corp.*, 713 F.2d 782, 787, 218 USPQ 698, 702 (Fed. Cir. 1983) and *In re Sernaker*, 702 F.2d 989, 995-96, 217 USPQ 1, 6-7 (Fed. Cir. 1983), both citing *In re Imperato*, 486 F.2d 585, 587, 179 USPQ 730, 732 (CCPA 1973)."

It is obvious that Hannah *et al.* does not teach the hypothetical 90 degree rotated device. It is also obvious that there is no reason to believe that the rotated device would be capable of performing the function of reducing wind induced first harmonic vibration of a pole recited in the rejected claims 33, 34, 44 and 45.

The anticipation rejection under 35 USC § 102(b) consequently does not comply with the requirements for such a rejection to be based on a reference having every limitation of the claimed invention so that the reference would infringe the claim if the claim had been in a prior patent as set forth by the Court of Appeals, Federal Circuit in Atlas Powder Co. v IRECO Inc., 51 USPQ 2d in which the Court at page 1945 quoted Gechter v Darideon, 43 USPQ 2d 1030, in stating:

"To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently." *In re Schreiber*, 128 F.3d at 1477. Anticipation of a patent claim requires a finding that the claim at issue "reads on" a prior art reference. *See Titanium Metals Corp. v Banner*, 778 F.2d 775, 781, 227 USPQ 773, 778 (Fed. Cir. 1985). In other words, if granting patent protection on the disputed claim would allow the patentee to exclude the public from practicing the prior art, then that claim is anticipated, regardless of whether it also covers subject matter not in the prior art. *See id.* at 781

Claim 33 recites a plurality of structural and functional distinctions not found in, or suggested by, Hannah *et al.* including:

(1) "A pole vibration damping assembly mountable on a vertical stationary pole for damping wind induced first harmonic mode pole vibrations."

Comment: Hannah *et al.* is solely concerned with reducing ***vibrations of rotating bodies*** and is neither concerned with, directed to, or capable of, reducing first harmonic mode wind induced pole vibrations. The Hannah *et al.* patent, when properly interpreted, can only provide anticipation of what it clearly discloses, and it is clear that Hannah *et al.* ***does not disclose*** "pole vibration damping assembly mountable on a ***vertical stationary*** pole for damping wind induced first harmonic mode vibrations".

The statement that Figure 8A of the Hannah *et al.* patent shows a device "mountable on a pole 32 capable of damping wind induced harmonic mode pole vibrations" is simply an improper speculation not having any support in the Hannah *et al.* disclosure. In fact, horizontal rotating shaft 32 clearly is not a "pole" under any proper definition

Moreover, the fact that the housing half-portions 90 and 91 are dimensioned so as to be mountable on rotating shaft 32 is not anticipation under 35 USC § 102(b) of the mountability of the half-portions 90 and 91 on a "vertical stationary pole" as recited in claim 33. The statement in the rejection that the half-portions are "dimensioned and shaped to fit in a mating manner over, and in facing contact with, an upper end portion of a pole" is simply unwarranted conjecture not appropriate for establishing anticipation under 35 USC § 102(b).

Moreover, further evidence of lack of anticipation by Hannah *et al.* is the fact that if claim 33 had been in a prior patent, it would not have been infringed by the Hannah *et al.* device since the above quoted language does not read on the Hannah *et al.* structure.

(2) "an annular housing including a horizontally oriented first housing component half-portion and a horizontally oriented second housing component half-portion horizontally aligned with the first housing component half-portion."

Comment: The housing component sections 90 and 91 of Hannah *et al.* are not horizontal and are not horizontally aligned but are vertically aligned and consequently are not anticipatory of the horizontally aligned half-portions and the claimed "connections" of the half-portions as recited in claim 33.

Moreover, further evidence of lack of anticipation by Hannah *et al.* is the fact that if claim 33 had been in a prior patent, it would not have been infringed by

the Hannah *et al.* device since the above quoted language does not read on the Hannah *et al.* structure.

(3) "each housing component half-portion including an inner partial cylinder sleeve having an inner partial cylinder sleeve surface having a lower end termination portion, a center of curvature and being dimensioned and shaped to fit in a mating manner over, and in facing contact with an upper end portion of a vertical stationary pole and having an axis approximately coextensive with the center of curvature of the pole."

Comment: The above language requires that each of the housing component half-portions have an inner partial cylinder sleeve surface having a lower end termination portion and a vertical center of curvature. The lower component 91 of Hannah *et al.* does not have a surface having "a lower end termination portion" and neither of components 90 and 91 has a surface having a ***vertical center of curvature***. Therefore, the quoted claim language is not anticipated by Hannah *et al.*

Moreover, further evidence of lack of anticipation by Hannah *et al.* is the fact that if claim 33 had been in a prior patent, it would not have been infringed by the Hannah *et al.* device since the above quoted language does not read on the Hannah *et al.* structure.

(4) "a plurality of vertical partitioning panels extending vertically upward from the floor panel and extending between the inner partial cylinder

sleeve and the outer partial cylinder sleeve to define non-circular damping weight receiving chambers between adjacent partitioning panels and a movable damping weight supported by the floor panel for horizontal rolling movement in each of the damping weight receiving chambers."

Comment: Hannah *et al.* does not disclose the above quoted structure.

Moreover, further evidence of lack of anticipation by Hannah *et al.* is the fact that if claim 33 had been in a prior patent, it would not have been infringed by the Hannah *et al.* device since the quoted language does not read on the Hannah *et al.* structure.

Claim 34 depends from claim 33 and should be deemed allowable for the same reasons as claim 33 as discussed above. Additionally, claim 34 further distinguishes over Hannah *et al.* in specifying that the damping weights are spherical balls and "the dimensions of the damping weight receiving chambers are of sufficient dimension to permit rolling movement of the spherical balls over a distance exceeding the radius of the spherical balls". It is pointed out that the aforementioned limitations are clearly and inherently self-evident from the drawings and are not disclosed in Hannah *et al.*

Claim 44 distinguishes over Hannah *et al.* in reciting a vibration reducing device for damping wind induced first harmonic mode pole vibrations and including "weight receiving chambers solely occupied by ambient air and a spherical ball and wherein the housing is shaped and dimensioned to encircle and facingly engage a pole to effect

mounting of the device on the pole". Further distinction over Hannah *et al.* is provided by the recitation of weight receiving chambers that are separated by planar panels.

Claim 45 should be allowed for the same reasons as its parent claim 44 as discussed above. Additionally, claim 45 specifies that the spherical ball damping weights are freely rollable in any horizontal direction in their respective weight receiving chamber so as to further distinguish over Hannah *et al.*.

REJECTION UNDER 35 USC § 103

Paragraph 8 of the Office Action rejected claims 35, 36, 46 and 47 under 35 USC § 103(a) as being unpatentable over Hannah *et al.* based upon the unwarranted contention that it would have been obvious to use metal or specifically lead as the material of the claimed balls. These claims should be allowed for the same reasons as their parent claim 33 as discussed above.

Claims 46 and 47 and depend from amended claim 44 and should be allowed for the same reasons as claim 44 as discussed above. Any further reliance upon nonanalogous Hannah *et al.* in rejecting claim 44 would be unwarranted and improper.

It is additionally noted that in paragraph 8 of the Office Action the rejection of claims 35, 36, 46 and 47 improperly relied upon *In re Leshin, 125, USPQ 416*, to support the Examiner's opinion that the mere existence of "known materials" such as metal or lead make it obvious under 35 USC § 103 of Hannah *et al.* to use ball damping weights of metal or lead.

The Examiner's reliance upon Leshin in paragraph 8 is not warranted since Leshin ***does not teach*** that the ***mere existence*** of a material renders use of the material obvious under 35 USC § 103. More specifically, in Leshin the relevant claims 14 and 15 were for a plastic container-dispenser for cosmetics and the Court relied upon prior art Anderson patent which disclosed a similar container made of plastic in confirming the rejection of claims 14 and 15 as stated on page 417 "as to those claims limited to plastic, dependent claims 14 and 15, Anderson shows a similar container of molded plastic". Thus, it is abundantly clear that the Court relied upon the Anderson ***patent*** for suggesting the use of a plastic material for forming a container and ***did not rely*** upon the ***mere existence*** of the plastic material in reaching its decision.

In order for a prima facie case of obviousness to be established, the ***applied prior art*** must be such that it would have provided one of ordinary skill in the art with both a motivation to carry out the claimed invention and a reasonable expectation of success in do so. In the present case there is ***no prior art*** which makes the use of metal or lead balls in Hannah *et al.* obvious. See *In re Vaeck, 947 F. 2nd 488, 493, 20 USPO 2ND 1438, 1442 (Fed. Cir. 1991); In re O'Farrell 853 F. 2nd 894, 902 7 USPO 2nd 1673, 1680 (Fed. Cir. 1988).*

The above comments are equally applicable to the first complete paragraph on page 7 of the Office Action in which *In re Leshin* is also improperly relied upon and identical language is employed to purportedly make the use of metal or lead obvious in the rejection of claims 39, 40, 48 and 49.

Claims 39 and 40 depend from claim 33 and should be allowed for the same reasons as claim 33.

Claims 49 and 50 depend from claim 44 and should be allowed for the same reasons as claim 44.

Paragraph 9 of the Office Action relied upon nonanalogous Hannah *et al.* in view of nonanalogous Kolya *et al.* U.S. Patent No. 4,655,317 in rejecting claims 39, 40, 48 and 49. The rejection erroneously contends the Kolya *et al.* would make it obvious to coat the claimed spherical balls with plastic. It is self-evident that the SOUND DAMPING DEVICE PREFERABLY FOR REDUCING THE NOISE OF BLOW-OFF VALVES of Kolya *et al.* is in a nonanalogous field of endeavor far removed from that of both the Hannah *et al.* device and the present invention and does not suggest the modification of the Hannah *et al.* device to provide a polyurethane coating on the Hannah *et al.* bolts in the manner proposed in paragraph 9 of the Office Action. Moreover, Kolya *et al.* ***does not disclose*** a spherical body as was asserted in rejection of claims 39, 40, 48 and 49 in that ***polyurethane foam body 14*** is ***not*** a sphere due to positioning of fitting member 2 in a large radial opening in body 14 which is at best a ***partial*** sphere formed of a polyurethane foam body coated with a polyurethane prepolymer solution. Kolya *et al.* does not even remotely disclose or suggest the desirability of applying a plastic or polyurethane coating on ***metal*** balls in the remote totally different field of vibration reduction for rotating objects of Hannah *et al.* or the field of wind induced pole vibration reduction of these claims.

Claims 39 and 40 should also be allowed for the same reasons as their parent claim 33 as discussed above and claims 48 and 49 should be allowed for the same reasons as their parent claim 44 as discussed above.

Paragraph 10 of the Office Action rejected claims 41, 42 and 43 as being unpatentable under 35 U.S.C. 103(a) over Hannah et al. in view of nonanalogous U.S. Patent No. 4,711,610 to Riehl.

The rejection of claims 41, 42 and 43 on nonanalogous Hannah *et al.* in view of nonanalogous Riehl was based on the erroneous contention that Riehl discloses "first and second planar plates" and that it would have been obvious to incorporate such plates in the Hannah *et al.* device. In actuality, Riehl ***does not disclose*** any planar plates at the end of the respective element 122 in that the end of element 122 is merely adjacent an open space, not a plate. Both Hannah *et al.* and Riehl are nonanalogous prior art with respect to the present invention ***and*** each other and the rejection is consequently fundamentally flawed and incorrect. Moreover, even if Riehl disclosed such plates, there would be no reason for incorporating them in Hannah *et al.* and the Examiner's contention that dividing of the annular chambers of Hannah *et al.* into arcuate pockets would result in adjusting the sensitivity of the damping function of the device is, at best, pure speculation which falls far short of a teaching of obviousness. The two reference devices are totally different from each other and the present claimed invention and there is absolutely nothing in Riehl to suggest the modification of Hannah *et al.* relied upon in the rejection of claims 41, 42 and 43.

Claims 41, 42 and 43 depend from claim 33 and should be allowed for the same reasons as claim 33 as noted above.

It is additionally noted that in paragraph 10 of the Office Action claims 41, 42 and 43 were improperly rejected by reliance upon *In re Leshin* in the same manner as discussed above with respect to paragraphs 8 and 9 with respect to the use of metal for the balls. Reference is therefore made to the above comments regarding the improper reliance on Leshin in the rejections made in paragraphs 8 and 9 of the Office Action. Such comments are equally applicable to claims 41, 42 and 43.

Please note that the Office Action Summary indicates that claims 33 through 49 were rejected. However, claims 37 and 38 were not specifically rejected in the body of the Office Action and are urged to be allowable for the same reasons as their parent claim 33 as discussed above. Additionally, claims 37 and 38 both further distinguish over the prior art in providing that the partitioning panels are "planar panels" and claim 38 further distinguishes over the prior art in providing that the partitioning panels are "planar panels oriented in substantially perpendicular manner relative to the floor panel". The cylinders labeled "Partitioning panels" in Figure 8A are not planar and do not anticipate the claimed "planar panels". Therefore, claims 37 and 38 should be allowed.

CONCLUSION

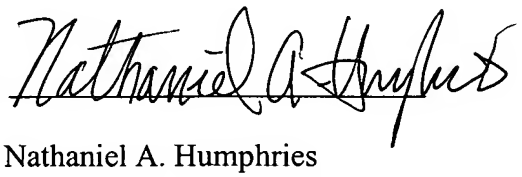
All formal matters have been complied with and the claims remaining in the application are directed to allowable subject-matter for the reasons noted above.

Passage of this application to issue is therefore urged to be in order and is earnestly solicited.

Respectfully submitted,

JACOBSON HOLMAN PLLC

Date: February 8, 2006

By: 

Nathaniel A. Humphries
Registration No. 22,772

Customer No. 00,136
Jacobson Holman, PLLC
400 Seventh Street, N.W.
Washington, D.C. 20004
(202) 638-6666

Attorney Docket: P69605US0